MEMORANDUM

DATE:	August 22nd, 2016
FROM:	Eric Lancaster
SUBJECT:	Weekly Progress Report @ Gold King
TO:	Kerry Guy

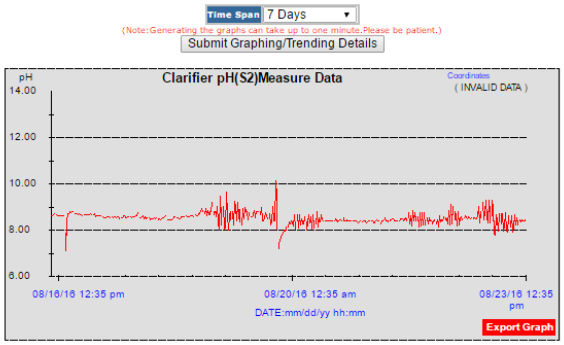
Project: Gold King Interim Water Treatment Plant (IWTP)
Location: Gladstone, Colorado
Prepared for: Emergency Response Unit – US EPA Region 8

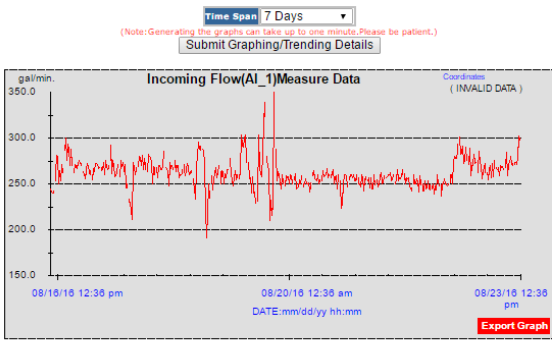
Reporting Period: Aug 15 – Aug 22
Report No.: 33

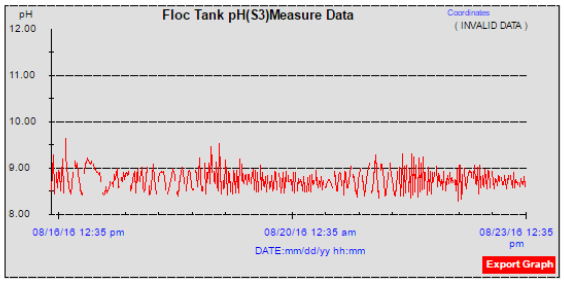
I. General Operations Summary:

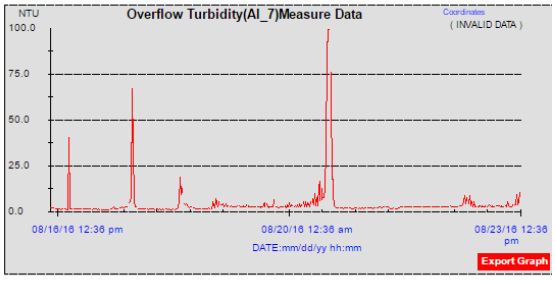
IWTS Function/Upsets

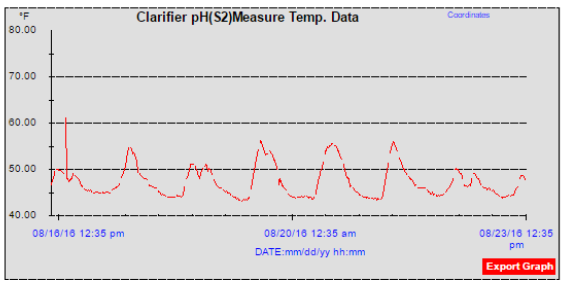
- The following graphs provide trending information during the previous 7 days. The dataloggers collect control information from the Lime Circuit (left) and Flow Circuit (right) Programmable Logic Controllers (PLCs) at the Gold King IWTP. Over the reporting period (8/15/16 – 8/22/2016 inclusive) Alexco treated 5.97 million gallons at an average flow rate of 592 gpm.

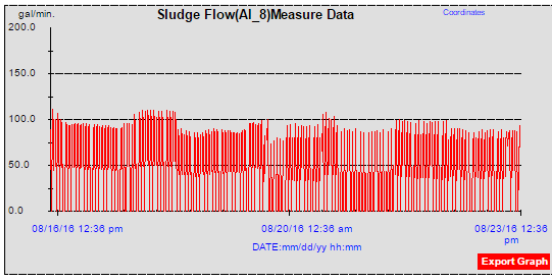












- Please note: Several days each week, the Alexco operators check the pH at both the floc tank and clarifier discharge. During this time, the probe is placed in vinegar (acid), and three pH buffers – 4, 7, and 10. While the probe is in the acid/buffer, the datalogger may captured one of those points for tracking purposes, which explains the occasional pH spikes seen on the graph. In addition, instantaneous spikes of the Overflow Turbidity Meter are associated with routine cleaning, which can cause the meter to spike temporarily up to 100 NTUs.
- A pH sample from the IWTP inlet on 8/17 measured 3.58.
- A pH sample from the IWTP inlet on 8/18 measured 3.50.
- A pH sample from the IWTP inlet on 8/19 measured 3.55.
- Lately, Alexco has been focused on sending sludge from the clarifiers to the bags in cells A and B. However, on 8/20 a spike in turbidity occurred and the Alexco operator switched to bag C giving the bags in A/B additional time to dewater. As of Monday (8/22) morning, bag A was again in service and bag C was shut-off.

Communication System Function Status

- No issues – reliable operations during the reporting period.

Facility or System Related Work, including Repairs & Completions

- N/A

II. Identified Problems, Causes, and Solutions (Planned or Implemented)

- There is concern that the A and B bags are full, and Alexco is currently filling bag C at times to allow the other bags to dewater. Alexco will continue to minimize bag C usage while focusing on utilizing the bags A and B throughout the remainder of August.

III. System Inspections – Specific elements inspected and finding

- N/A

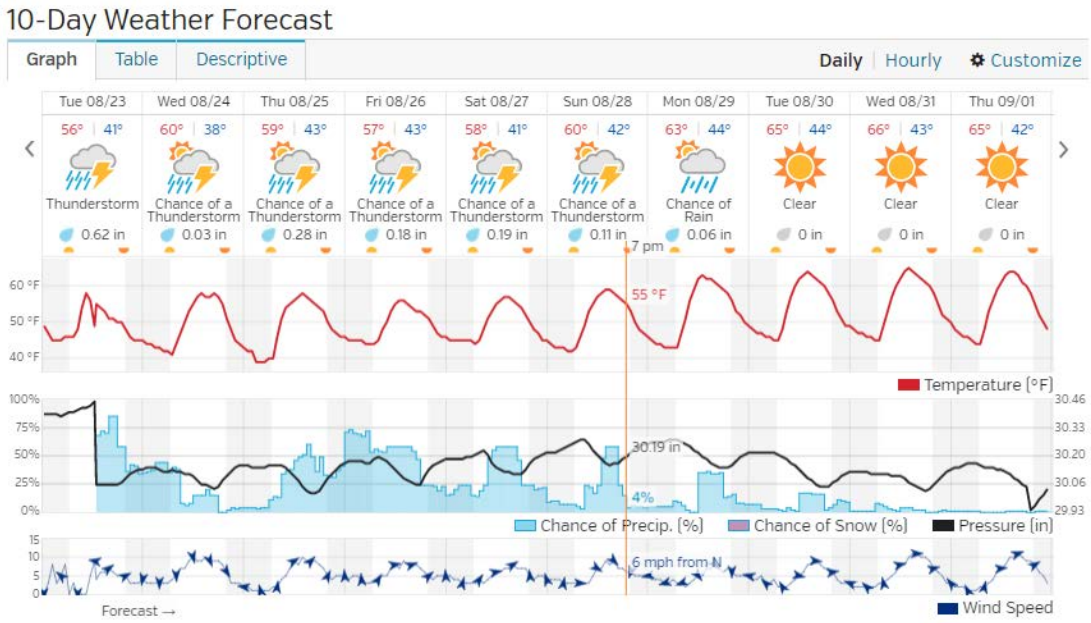
IV. Site Status

Personnel and equipment onsite

- Alexco currently employs one full-time employee (FTE) who lives in Silverton and oversees all operations at the Gold King IWTP. He is supported by remote operators in Denver, and local sub-contractors as needed.

Weather conditions

- Weather Underground Report for Silverton, CO (8/23/2016 – 9/01/2016)



Pictures from Site

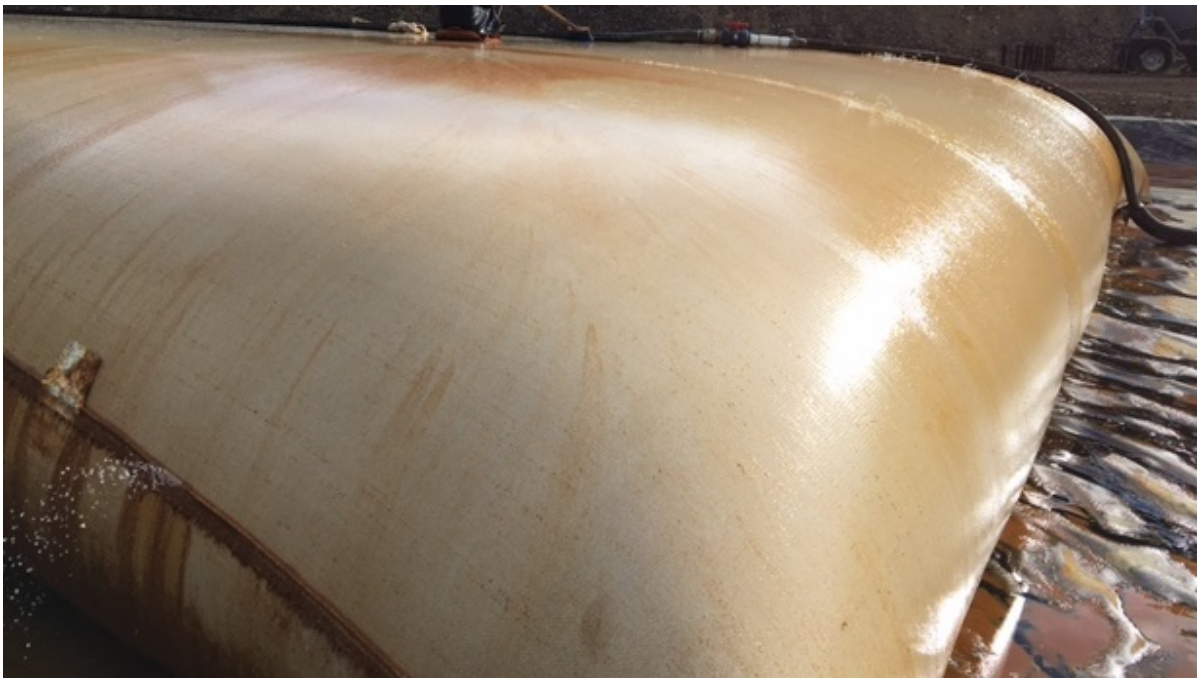


Photo 1: Bags in the A and B cells are full, but continuing to dewater.

Photo 2: A plate compactor was tested to see if additional energy improved dewatering. There was an initial release, but it did not make any longer term improvements in dewatering.

Photo 3: The plate compactor created an accelerated release of water and micro-sludge from the bag.